

REMARKS

The Patent Office is thanked for its indication of allowable subject matter in claims 3-5; however, Applicant believes all pending claims are allowable over the prior art of record.

Claims 1-14 are currently pending. Claims 1, 5, 8, and 14 have been amended for clarification purposes only. It is respectfully submitted that no new matter has been added.

The Patent Office rejected claims 1, 2, and 6-14 under 35 U.S.C. 102(b) as being anticipated by Kacines, U.S. Published Patent Application No. 2001/0054102.

For a claim to be anticipated, each and every non-inherent claim limitation must be taught in a single reference. MPEP 2131.

Claim 1 recites as follows:

A data handling apparatus capable of operating in a system in which two or more devices are connected by a data bus for the transmission of communications therebetween, the data bus having two or more data lines and each of the two or more devices having: two or more data bus connectors, each for connection to a respective data line of the data bus; an identity acquisition unit capable of **functioning in a first mode of operation of the device to receive data transmitted over the data bus and in response to the order in which the bits of one or more data words of a predetermined form are received on the data bus connectors during the first mode of operation determine an identity for the device** and store the identity in an identity store of the device; and a data handling unit capable of functioning in a second mode of operation of the device to handle communications transmitted over the bus and that specify the identity stored in the identity store as a destination.

Claim 9 recites as follows:

A data handling system comprising two or more data handling devices, each of the two or more data handling devices comprising: a data bus; two or more data bus connectors, each for connection to a respective data line of the data bus; an identity acquisition unit capable of **functioning in a first mode of operation of the device to receive data transmitted over the data bus and in response to the order in which the bits of one or more data words of a predetermined form are received on the data bus connectors during the first mode of operation determine an identity for the device** and store the identity in an identity store of the device; and a data handling unit capable of functioning in a second mode of operation of the device to handle communications transmitted over the bus and that specify the identity stored in the data store as a destination.

Claim 13 recites as follows:

A method for assigning an identity to each of two or more devices of a data handling apparatus capable of operating in a system in which said two or more devices are connected by a data bus for the transmission of communications therebetween, the data bus having two or more data lines and the device having two or more data bus connectors, each connected to a respective data line of the data bus, the method comprising: in a first mode of operation of the device, **receiving data transmitted over the data bus and in response to the order in which the bits of one or more data words of a predetermined form are received on the data bus connectors during the first mode of operation determining an identity for the device**; and storing the identity in an identity store of the device.

The Patent Office asserted that paragraphs 0004, 0005, 0014-0016, and 0021-0024 disclose the invention of claims 1, 2, and 6-14.

Kacines, paragraphs 0004 and 0005, discloses as follows:

One aspect of the invention is a method of logging in a device to a network of devices. Each device stores an identification number unique to that device. A network controller first delivers a control code to each device on the network indicating that a login process is to begin. The controller then broadcasts a pattern of requests and receives acknowledgements from devices attempting to login. The requests inquire as to the value of successive bit positions of the devices' identification numbers, and the pattern of requests varies depending on which requests are acknowledged. The controller traverses a binary tree in response to acknowledgements, thereby determining the identification number of the device. One advantage of the invention is that it eliminates the need to provide unique identifiers to the network prior to adding a device to the network. All that is required is for the device itself to store its own identifier--the network "learns" the identifier by means of the login process without having to actually address the device. This is accomplished without signal blocking schemes.

Kacines, paragraphs 0014-0016, discloses as follows:

As illustrated, each device 11 is assigned a unique ID number, which it stores in memory 11a. For simplicity of example herein, the ID numbers of FIG. 1 have only 3 bits. A first device has ID number 001, a second has 010, a third has 011, and a fourth has 110. Each device 11 also has a tracking register 11b, which tracks identification request signals received from controller 12 during the login process. The login process of FIG. 1 may be performed any time it is desired to determine whether a new

device 11 connected to network 10 and is attempting to login. The login process permits that device 11 to be identified and to be assigned a network address. This in turn, permits the device to send and receive data via the network. In a typical network 10, controller 12 will initiate the login process periodically, with the frequency being related to the likelihood that new devices 11 are being added. For example, in a quickly changing network, controller 12 might initiate a new login process once every few seconds. Devices 11 that have not yet logged in are programmed to wait for a login initialization code, and to then receive requests and deliver acknowledgements as described below. The ID number stored in each device 11 need not be its address for network purposes. In other words, once a device 11 is logged in, the device may be assigned a dynamic address. Network communications may then proceed in accordance with standard network protocol.

Kacines, paragraphs 0021-0024, discloses as follows:

The first request from controller 12 queries for the value of a first bit position of device IDs. In the example of FIG. 2, the request is a request to any device 11 to acknowledge if its MSB (most significant bit) is 0. In other embodiments, the request order could be reversed such that the LSB (least significant bit) is the subject of the first request. Also, the order of the bit values could be reversed, such that the first request is for values of 1 rather than 0. After a predetermined time, those devices having a 0 as the MSB of their stored ID number respond to the request. If no devices respond in that time, controller 12 assumes that there is no device attempting to login that has a 0 in the MSB of its ID number. Referring again to FIG. 1, Device 1 and Device 2, which have ID numbers of 001 and 010, respectively, acknowledge the first request. Device 3 and Device 4 do not acknowledge the query. Device N does not have a 0 as its MSB. Device 3 has already logged in. Referring to both FIGS. 1 and 2, if there is an acknowledgement to the first request, controller 12 sends a next request to determine whether any device is attempting to login that has a 0 in the next significant bit of its ID number. If there is no acknowledgement to the first request, the next request from server/controller 12 is to determine whether any devices are attempting to login that have a 1 as the MSB.

Claim 1, specifically, recites “each of the two or more devices having... an identity acquisition unit capable of **functioning in a first mode of operation of the device to receive data transmitted over the data bus and in response to the order in which the bits of one or more data words of a predetermined form are received on the data bus connectors during**

the first mode of operation determine an identity for the device.”

In Kacines, each device 11 is assigned a unique ID number (paragraph 0014). In paragraphs 0021-0024 of Kacines, the identity of each device is already determined within the device and the controller 12 queries the devices 11 from the MSB to the LSB or from the LSB to the MSB of their assigned identities in a login process. Kacines, paragraph 0027, discloses that by traversing a binary tree, the controller 12 determines the identification number of a device 11 that is attempting to login. Claim 1 recites “each of the two or more devices” has “an identity acquisition unit... in response to the order in which the bits of one or more data words of a predetermined form ... determine an identity for the device...” Where is the identity acquisition unit in Kacines? Where does Kacines disclose an identify acquisition unit in each of two or more devices? This subject matter from claim 1 is not found in Kacines. Kacines does not disclose or suggest that the identity of the device is determined in response to the order in which the bits of one or more data words of a predetermined form are received on the data bus connectors.

Thus, claims 1, 2, and 6-14 are not anticipated by Kacines.

The Patent Office is respectfully requested to reconsider and remove the rejections of the claims 1-14 under 35 U.S.C. 103(a) based on Kacines, and to allow all of the pending claims 1-14 as now presented for examination. An early notification of the allowability of claims 1-14 is earnestly solicited.

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